

REMARKS

Applicants appreciate the Examiner's thorough consideration provided the present application.

Claims 1-5, 7, 8, and 10-12 are now present in the application. The specification and claims 1-5, 7 and 8 have been amended, claims 6 and 9 have been cancelled, and claims 10-12 have been added. Claims 1 and 2 are independent. Reconsideration of this application, as amended, is respectfully requested.

Information Disclosure Citation

Applicants have submitted the references supplied with the Information Disclosure Statement filed on January 22, 2002 for consideration by the Examiner. The Examiner is courteously requested to provide Applicants with an initialed copy of the PTO-1449 form filed therewith with the next official communication.

Specification

The specification has been objected to because the Abstract does not commence on a separate page. The specification has been amended to address the Examiner's requested correction. Accordingly, this objection has been obviated and/or rendered moot.

Claim Rejections Under 35 U.S.C. §112

Claims 1-9 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particular point out and distinctly claim the subject matter which Applicants regard as the invention. These rejections are respectfully traversed.

The Examiner has indicated that the definition of the term "micro-phase shift" recited in claims 1 and 2 is unclear. Applicants respectfully submit that a micro-phase shift is a delay of the instant electric pulse, which is fully supported by the Specification of the instant application that "... micro electric phase shifts shifting the instant electric pulse into delayed electric micro-pulses..." (see page 1, ll 20-21.)

In addition, as the Examiner will note, claims 1-5, 7, and 8 have been amended to provide sufficient antecedent basis and to make the claimed invention well defined. Accordingly, claims 1-5, 7, and 8 are now definite and clear.

In light of the foregoing amendments to claims 1-5, 7 and 8, Applicants respectfully submit that this rejection has been obviated and/or rendered moot. Reconsideration and withdrawal of the rejection under 35 U.S.C. § 112, second paragraph, is therefore respectfully requested.

Claim Rejections Under 35 U.S.C. § 102

Claims 1-3 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Kates, U.S. Patent No. 4,243,840. These rejections are respectfully traversed.

In light of the foregoing amendments to the claims, Applicants respectfully submit that these rejections have been obviated and/or rendered moot. As the Examiner will note, independent claim 1 has been amended to recite a combination of elements including "an oscillator between an electric audio signal supply and at least one electro-acoustic transducer, said oscillator comprising at least one electric component per channel on three channels in parallel... said oscillator... modifies an original electric pulse into at least one electric micro-phase-shift pulse", and independent claim 2 has been amended to recite a combination of elements including "an oscillator with at least one electric component per channel on three channels in parallel... between an electric power supply and at least one electro-acoustic transducer, said oscillator creating at least one electric micro-phase shift modulation of an original electric pulse." Applicants respectfully submit that the combinations of elements as set forth in amended independent claims 1 and 2 are not disclosed or suggested by the references relied on by the Examiner.

Kates discloses a loudspeaker system comprising an active crossover network for dividing the signal energy of an input audio

signal into three frequency ranges applied to three speakers and an passive crossover network for separating the high and low frequencies to prevent the low/high frequency signal from reaching high/low frequency driver.

However, Kates fails to disclose "an oscillator between an electric audio signal supply and at least one electro-acoustic transducer, said oscillator comprising at least one electric component per channel on three channels in parallel... said oscillator... modifies an original electric pulse into at least one electric micro-phase-shift pulse" as set forth in independent claim 1 and "an oscillator with at least one electric component per channel on three channels in parallel... between an electric power supply and at least one electro-acoustic transducer, said oscillator creating at least one electric micro-phase shift modulation of an original electric pulse" as set forth in independent claim 2.

As shown in FIG. 2 of Kates, the active crossover network is placed before the power amplifiers rather than "between an electric audio signal supply and at least one electro-acoustic transducer" as recited in claim 1 or "between an electric power supply and at least one electro-acoustic transducer" as recited in claim 2. In addition, the passive crossover network (passive crossover filters 30 and 28 between the power amplifier (26A) and the speakers (22 and 18) comprises one electric component per channel on two channels in parallel, rather than on three channels in parallel as recited in

claims 1 and 2. Furthermore, the passive crossover filters (30 and 28) in Kates do not modify an original electric pulse into at least one electric micro-phase-shift pulse or create any electric micro-phase shift modulation of an original electric pulse, but only divide the original signals into two frequency ranges. Since Kates fails to teach each and every limitation of independent claims 1 and 2, Applicants respectfully submit that amended independent claims 1 and 2 are not anticipated by Kates.

In addition, claims 3-5, 7, 8, and 10-12 depend directly or indirectly from amended independent claim 2, and are therefore allowable based on their respective dependence from amended independent claim 2, which is believed to be allowable.

In view of the above remarks, Applicants respectfully submit that claims 1-5, 7, 8, and 10-12 clearly define the present invention over the references relied on by the Examiner. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 102 are respectfully requested.

Conclusion

It is believed that a full and complete response has been made to the Office Action, and that as such, the Examiner is respectfully requested to send the application to Issue.

In the event that any outstanding matters remain in this application, the Examiner is invited to contact the undersigned at (703) 205-8000 in the Washington, D.C. area.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), the Applicants respectfully petition for a one (1) month extension of time for filing a response in connection with the present application and the required fee of \$110.00 is attached herewith.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees

Certificate of Transmission
I hereby Certify that this correspondence is being
facsimile transmitted to the Patent and
Trademark Office
On 10/8/04 Date
Shay Canfield Signature
SHAY CANFIELD
Typed or printed name of person signing certificate

KM/GH/asc
0040-0152
G18

Attachment: Abstract of the Disclosure

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By Joe McKinney Nuncy
Joe McKinney Nuncy, #32,334

P.O. Box 747
Falls Church, VA 22040-0747
(703) 205-8000

ABSTRACT OF THE DISCLOSURE

It is usual to utilize electric current filters for electroacoustic transducers, the filters are in general frequency mixers. Audio electric signals have a pulse response quality and excellent frequency adjustment. As for electroacoustic transducers, the transformation is not properly carried out for electroacoustic transducers. The electric pulses travel at the speed of the electrons whereas the membrane and its motor have a specific weight. The weight has a mechanical inertia preventing an instantaneous response to the electric effects. A method can modify at least one modulation of the original electric pulse into micro electrical phase shifts. The micro phase shifts are generated by impedance of the components. An apparatus has several components of similar type mounted in parallel, thereby forming a self-powered oscillator, energized by the original electric signal. The apparatus is mounted on the circuit powering the enclosure.